

Title (en)

METHOD FOR MEASURING FAULT LOCATIONS IN HIGH FREQUENCY CABLES AND LINES

Title (de)

VERFAHREN ZUR FEHLERORTSMESSUNG BEI HOCHFREQUENZKABELN UND -LEITUNGEN

Title (fr)

PROCEDE DE MESURE POUR LA LOCALISATION DE DEFAUTS DANS DES CABLES ET DES LIGNES HAUTE FREQUENCE

Publication

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Application

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Abstract (en)

[origin: WO0196887A2] The invention relates to a method for measuring fault locations in high frequency cables and lines. A signal with the frequency  $f_0$  and a level  $a_0$  is emitted from the source. This signal is split up in the splitter and is routed to the same parts in the test piece (DUT = device under test) and to a sink. The signals of the source and the returning wave of the DUT are added, whereby the result of this addition is a signal with the frequency  $f_0$  and an amplitude  $a_1$ . The value of the frequency  $f_0$  is changed, and the amplitude of the newly generated sum signal is, in turn, recorded, whereby this is repeatedly carried out in an appropriate frequency domain (Span). An inverse Fourier transformation is applied to the measured values and transforms the signals from the frequency domain into the time domain. The transition point, which appears as the defined peak in the time diagram, can, as a result, be found located while taking the shortening factor into account.

IPC 8 full level

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